

REMARKS

This paper is being provided in response to the Office Action mailed May 27, 2004, for the above-referenced application. In this response, Applicants have cancelled claim 45 without prejudice or disclaimer of the subject matter thereof, amended claims 23, 43, 44 and 47 and added new claims 48 and 49 to clarify that which Applicants consider to be the invention. Further, Applicants have amended the Abstract for purposes of clarification. Applicants respectfully submit that the amendments to the claims and the new claims are fully supported by the originally-filed specification and that the amendments to the Abstract do not add new subject matter.

Applicants thank the Examiner for the indication of allowable subject matter in claims 23-25. Applicants have rewritten claim 23 into independent form to incorporate the features of the base claim and any intervening claims. Claims 24 and 25 depend therefrom. Further, Applicants note that claims 37-41 also depend from claim 23. Applicants respectfully submit that these claims are in condition for allowance.

The objection to the Abstract as being too long has been addressed by amendments to the Abstract contained herein. Accordingly, Applicants respectfully request that this objection be reconsidered and withdrawn.

The rejection of claims 1, 3-6, 8, 34, 42, 44 and 47 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,646,719 to Lee et al. (hereinafter "Lee") is hereby traversed and reconsideration is respectfully requested.

Independent claim 1 recites an arrangement for holding a particle beam apparatus, in particular a transmission electron microscope. A base structure includes a plurality of hollow bodies. At least one of the hollow bodies has a first length extension in a first direction, a second length extension in a second direction and a third length extension in a third direction, the length extension in the first direction being larger than the length extensions in the second and third directions. A cross section of the at least one of the hollow bodies perpendicular to the first direction is substantially triangular. Claims 2-22, 26-36, and 47 depend from independent claim 1.

Independent claim 42 recites a particle beam apparatus. A particle optical column includes a particle source and particle optical components. A base structure comprises a plurality of hollow bodies, the particle optical column being suspended on the base structure. At least one of the hollow bodies has a first length extension in a first direction, a second length extension in a second direction and a third length extension in a third direction, the length extension in the first direction being larger than the length extensions in the second and third directions. A cross section of the at least one of the hollow bodies perpendicular to the first direction is substantially triangular.

The Lee reference a support assembly for an exposure apparatus. The support assembly comprises hollow bodies in the form of base outer tubes 46A, 46B and 46C. (See col. 5, lines 34 to 44 and Fig. 4 of Lee.) The cross section of each base outer tube 46A, 46B and 46C perpendicular to the longitudinal axis of each base outer tube, being the largest length extension

of each base outer tube, is round shaped and not substantially triangular. (See Figs. 5B and 5C of Lee.)

Applicants' independent claim 1 and 42 recite that in a arrangement for holding a particle beam apparatus, a base structure comprises a plurality of hollow bodies, at least one of said hollow bodies having a first, second and third length extensions in first second and third directions, *the length extension in the first direction being larger than the length extensions in the second and third directions, and wherein a cross section of said at least one of said hollow bodies perpendicular to said first direction is substantially triangular.* The Lee reference does not teach a base outer tube which has a cross section perpendicular to a first direction being substantially triangular. Instead, Lee teaches that a support assembly comprises base outer tubes 46A, 46B and 46C having a round tubular form (see Figs. 5A, 5B, 5C and Figs. 7A, 7B and 7C of Lee) and which are connected together to form a triangular shaped outer base 51 (See. col. 5, lines 49-41 of Lee.) However, the *cross sections* of Lee's base outer tubes perpendicular to the first direction are not triangular as is recited in Applicants' present claimed invention.

Accordingly, in view of the above, Applicants respectfully request this rejection be reconsidered and withdrawn.

The rejection of claims 2, 7, 9-22, 26-41 and 43-46 under 35 U.S.C. 103(a) as being unpatentable over Lee and further in view of U.S. Patent No. 4,044,256 to Krisch et al. (hereinafter "Krisch") is hereby traversed and reconsideration is respectfully requested.

As noted above, Applicants submit that claims 37-41 depend from claim 23 that the Examiner indicates as containing allowable subject matter and which has been rewritten into independent form.

The features of independent claim 1 are discussed above with respect to Lee. Claims 2, 7, 9-22 and 26-36 depend therefrom.

Independent claim 43, as amended herein, recites a particle beam apparatus. A particle optical column includes a particle source and particle optical components. A base structure comprises a plurality of hollow bodies, wherein at least one of the plurality of hollow bodies has a first length extension in a first direction, a second length extension in a second direction and a third length extension in a third direction. The first length extension is larger than the second and third length extensions. A cross section of the at least one of the plurality of hollow bodies perpendicular to the first direction is substantially triangular. The particle optical column has a center of gravity and the particle optical column is suspended on the base structure with a suspension center not or above the center of gravity of the particle optical column.

Independent claim 44, as amended herein, recites an arrangement for holding a particle beam apparatus, in particular a transmission electron microscope. The arrangement includes a base structure having four footings, wherein one of the footings is moveable with respect to the base structure. A movement of one of the footings is force loaded and one of the footings comprises a brake by which movement of the one of the footings with respect to the base structure can be blocked. Claim 46 depends from independent claim 44.

The Kirsch reference discloses a support stand for a corpuscular-beam microscope having a hollow rectangular-shaped vertical support member 2 and a base structure in the form of a horizontal base member 3 disposed on the support member 2. Two vibration-free high vacuum pumps 5 and 6 and an electronic control and regulating unit 7 are also mounted on support member 2. The base member 3 comprises a pair of crossed beams 3a and 3b. (See col. 2, lines 50-62 and Figs. 1 and 2 of Kirsch).

Applicants respectfully submit that Kirsch fails to overcome the above-noted deficiencies of the Lee reference with respect to Applicants' present claimed invention. Specifically, Kirsch discloses a hollow, rectangular-shaped vertical support member 2 but does not mention explicitly that cross beams 3a and 3b are hollow bodies either in the specification or the figures. Moreover, the crossed beams 3a and 3b do not comprise a cross section perpendicular to their largest length extension which is substantially triangular. Instead, the crossed beams 3a and 3b have a rectangular-shaped cross section perpendicular to the largest length extension.

Applicants respectfully submit that neither Lee nor Kirsch, taken alone or in combination, teach or fairly suggest at least the features that in a particle beam apparatus or an arrangement for holding a particle beam apparatus, a base structure comprises a plurality of hollow bodies, at least one of said hollow bodies having a first, second and third length extensions in first second and third directions, *the length extension in the first direction being larger than the length extensions in the second and third directions, and wherein a cross section of said at least one of said hollow bodies perpendicular to said first direction is substantially triangular*, as is claimed

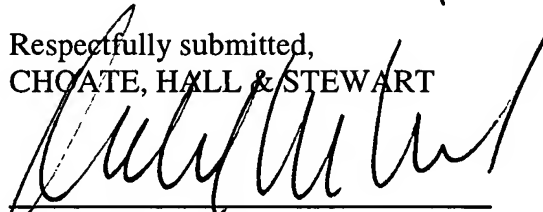
by Applicants in independent claims 1, 42 and 43. Accordingly, Applicants respectfully request that this rejection be reconsidered and withdrawn.

Further, with respect to independent claim 44, Applicants have amended this claim to recite an arrangement for holding a particle beam apparatus that includes a base structure with four footings, and wherein a movement of one of said footings if force loaded, and wherein said one of said footings comprises a brake by which a movement of said one of said footings with respect to said base structure can be blocked. As noted in the Office Action, Lee does not teach the use of footings. Moreover, Krisch does not teach the use of footings wherein one of said footings comprises a brake by which a movement of the footing with respect to the base structure can be blocked. Instead, Krisch discloses footings in the form of pad members 9 and 10 having resilient as well as vibration-damping characteristics which are moveable anytime with respect to the base structure. Accordingly, Applicants respectfully request that the rejection of this claim be reconsidered and withdrawn.

Further, Applicants have added new claims 48 and 49 and respectfully submits that this claim is patentable over the prior art of record. Specifically, with respect to claim 48, Kirsch teaches to mount the microscope housing 4 to the support member 2 via a connection member 8 at *approximately the height of the center of gravity S'* of the microscope housing 4 (see col. 3, lines 51-54 of Kirsch). Applicants' new claim 48 recites that the particle optical column is suspended on a base structure with a suspension center above the center of gravity of the particle optical center.

Based on the above, Applicants respectfully request that the Examiner reconsider and withdraw all outstanding rejections and objections. Favorable consideration and allowance are earnestly solicited. Should there be any questions after reviewing this paper, the Examiner is invited to contact the undersigned at 617-248-4038.

Respectfully submitted,
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